



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

THE SCHOOL REVIEW

A JOURNAL OF SECONDARY EDUCATION

VOLUME VI
NUMBER I

JANUARY, 1898

WHOLE
NUMBER 51

THE GROWTH OF MIND AS A REAL AND THE INFLUENCE OF THE FORMAL ON THE REAL

CHAPTER I

THE REAL AND FORMAL

I HAVE in the Institutes of Education first surveyed mind on the sensational or attitudinal plane, taking animal or pre-rational mind as object of investigation; and thereafter, I dealt with the higher evolution—the formal of mind as that emerges in the man-animal. This “formal” of mind (pure reason) has for its function, the discrimination and elaboration of the crude matter of attuition, and also continues, without ceasing, to deal with the knowledge results, already more or less elaborated by the earlier activities of the formal process. But the primary matter on which the activity of the formal process first exercises itself is the datum of sense-attuition (inner and outer), or, generally, of Recipience.

The total resultant at any one moment in any normal mind, accordingly, is: (*a*) attitudinal or recipient data; (*b*) the universals in the data which constitute the conditions of the possibility of all sentience; (*c*) the formal process itself; and (*d*) the resultant elaborations of that formal process. All this taken together we may call the Real of mind, and of each individual mind at any particular moment of time. For the formal process is itself a real in a higher meaning than the received data in

sense (inner and outer). At the same time, we need a word to designate the "given" or recipient in mind as distinguished from the formal; and, accordingly, it is as well to use the recognized term "real" to name the recipient datum generally. The total resultant of real and formal in a consciousness might be called "factual" mind.

I have dealt in a very brief and perfunctory way with the growth of the real of mind in the Institutes and I would now offer to those who are interested in the subject as students of educational theory a fuller treatment of the way in which attitudinal mind seems to me to build itself up as a concrete whole of experience.

CHAPTER II

DYNAMICS OF MIND

The Real in Mind as Received

The real which exists and builds itself up in the conscious subject, prior to the emergence of formal pure activity as will-reason, proceeds in accordance with natural laws which have probably a close analogy with the natural processes that build up the physical vehicle of nerve-tissue; nay, also the processes that build up all organisms. When *B* is presented to *A* (the conscious subject) and *A* is aware of it (I pass over rudimentary "feeling," of which we can know little) we call *A* mind and *B* the presentation. But, further, mind being the "subject" of the presentation we call *B* the "object." This is the stage of Sensation.

Whether from within the body or from without the body, the access of presentations is through nerve-tissue, and the reactions are also through nerve-tissue. The terminal of the impression is consciousness, and the reflex return starts in and from consciousness.

This nerve-tissue (which may be summed up in the one word *cerebrum*), inasmuch as it is matter, obeys the laws of matter, and, as vehicle of consciousness, receptive, or reactive, or active, is probably the highest department of physics. Whatever the

laws be whereby the nerve-cells transmit movements and maintain communication with each other, and subsequently repeat for themselves, under some inner stimulus (which we may call automatic) past movements and agitations when the object is absent—I say, whatever these laws may be, it cannot be doubted that they exist. How else can we explain dreaming, and all involuntary recurrences of past experiences? As a system, these laws or ways of procedure would be called cerebral dynamics, or the dynamics of cerebation. But this would not be the dynamics of mind.

As might be expected *a priori*, there is little doubt that there is unceasing cerebation without consciousness as a concomitant.¹ It is a certain point in the physical process, and under certain conditions that cerebation passes into consciousness.

That cerebrations exist and affect each other, and, without the presence of fresh stimuli from without, set up in the subject a consciousness which is neither the *A* of primary impression nor the *B*, but a resultant and complex *C*, is not incredible—on the contrary, highly probable; nay, may we not say certain? The dynamics of cerebation we may here leave; for little is known about it, and inferences are unfortunately drawn from that little which fill the “non-scientific” and merely metaphysical mind, with amazement.

It is with the action of the environment (including the cerebrum as part of the environment) when it has accomplished the transition into “consciousness” that we are concerned. Here unquestionably, we find a mutual involvement and reciprocity of mind and cerebrum. Cerebation sets up a consciousness, and consciousness or mind, in its turn, sets up a *cérébation*. It is not a molecular disturbance of nerve-cells which causes a dog to seek water, but the consciousness of thirst that results from that molecular disturbance and which sets in motion the whole motor system with a view to the satisfaction of desire.

[This process whereby consciousness is evoked is always, of course, a cosmic mind process (and consequently reason-implicit) which attains its own

¹ Appendix B.

ends such as they are ; but it has to await the next cosmic evolution of mind as will-reason (explicit reason involving self-consciousness) before cosmic can be discriminated and affirmed as reason by reason and for reason.]

Accordingly, the "natural" processes of merely conscious mind resolve themselves into reflex-activities and are to be distinguished as the dynamics of mind as opposed to the higher will-movement, which is the rational of mind. We must recognize, in the fullest sense, the reproduction, fusion and interaction of received experiences and the importance of ascertaining the process whereby mind, apart from the formal activity, builds up aggregate wholes and sequent series.

The area of this or that individual conscious subject is, as a matter of fact, restricted, but we do not doubt that there must reside in reflexive consciousness as such the potentiality of reflexing the whole natural world of which it is a part.

The *conditions* of the possibility of the natural dynamics of, and in, a conscious subject are: reflex-activity, memory, imagination, and comparison. I will call these conditions, because they are not in any strict sense the process itself. The real process itself, as distinguished from the formal or rational process, is absorption of the datum into the substance of the conscious subject—that which is not subject into subject: in other words, the universe of outer and inner sense as far as the subject by its constitution or circumstances can reach.

This process of absorption is generally called Assimilation; an inadequate word. Inadequate, because assimilation means the conversion into its own tissue of that which is identical with it (save numerically); whereas the conscious subject absorbs the object into its substance reflexively, *i. e.*, the object is now truly of the substance of consciousness, *but only* as matter or content to form: the object has not become the subject but only *in* and *for* the subject. Still, it would appear that we must use "assimilation" as there is no other available word—"translation" or transmutation might be misleading). But let us consider this.

When conscious subject finds itself in possession of object it thereafter grows as a one organism of reality by relating fresh reality to the reality already achieved in and for it; just as in the case of plant, or animal, tissue. If a new reality cannot be related, it falls out altogether; or it remains as the negation of the matter already in, or part of, conscious subject: it is held fast by this relation of negation till, by the help of further fresh material, it either becomes a nucleus of a new context of experience or is enabled to relate itself to the already existing content and so contribute to the further growth of the conscious subject as a real. But let us note that a fresh reality which finds a point of attachment in the already existing content of mind is not assimilated to that already existing content, in the sense of simply entering into its identity, or quantitatively enlarging it; but always *preserves its own difference* while organically grafting itself on the content. (Difference in identity is the mode of growth.) Still we may say that the growth of the content of mind as a real is by an assimilative process—certainly not by mere aggregation; for consciousness and its content are not to be likened to a sack full of peas. There are loose peas to be found—much unassimilated material, mere negations of the existing content and context; but the actual growth of the conscious subject as a real is an organic growth (as, for example, in animals), even prior to the emergence of formal reason.

Now, how does this organic growth come about, if it be the case that the conscious subject as a sensational or attitudinal entity is merely an absorbent and reflexive “somewhat?” Whence and how the organizing?

I reply, it is organizing so far only as the conscious entity is reflexing what is, in truth, as object, *already* a connected and organized object. Every individual object is related to its own parts and to the whole world either really (innerly) by organic reciprocity or modally (externally) in space and time. In so far then as the content or real of the conscious subject is a truly organic content it is so in proportion to the truth of its reflexive activity.

The actually-existing relation of things, then, which we call an object—the universal object, the receivable world—transfers itself to the conscious subject as an *already related* content or organism so far as the organism is adequate and true; and all of the content in any conscious subject that is not related lies outside the related and organized content in negation awaiting relation. The inner relating (which we call assimilation) of new content to already existing content depends on an already existing outer relation of which it is a copy.

When we consider that, if recipient and passivo-active (reflexive) mind, is to grow at all as an organism, every addition to the organic content must be a difference in identity (just as the Universal Object is a sum of differences in identity), and when we further consider the qualifications with which we must use the term “assimilation,” it might be said that the word “association,” which begs no question, is after all the best word to use in order to denote the dynamics of mind-growth. Assimilation, however, would still have to be used to denote the crisis of absorption. Association means engrafting, but the graft is not the stock. Accordingly we shall say after this explanation :

A. The real process in the dynamic growth of mind as a real is assimilation of presentations from within and without, and the result is “truth” in so far as subject truly reflects the objective reality; but it is only sensational truth—the first moment of true knowledge.

B. The formal process in the growth of mind as a real is reason (*i. e.*, Will as dialectic). Of this we have already spoken at sufficient length. Its aim is absolute truth, *i. e.*, the synthesis of experience in its truth—Knowledge.

As I have said, the content of consciousness is not an aggregate of loose peas. There is a running together of those experiences that resemble each other into clumps. And yet it is not correct to speak, as many do, of the growth of the real of mind as always an assimilation of fresh presentations with already existing masses. As I have said above, new material may be received by consciousness which does not admit of being brought

into any save a negative relation to the existing matter of consciousness (just as the primordial experience of the conscious subject must be a negation of itself).

But although the new matter may not be able to force an entrance into the already existing homogeneous masses that constitute the real or body of mind so far as it has yet lived, yet it is not wholly single and isolated; for it finds those elements of the matter of mind which are implicit in all recipience whatsoever ready to give it a welcome, viz., the consciousness of being, of space, and of time. Thus are assigned to the freshest and most refractory experience, being, locality, and position in time, which help to sustain it in its negative isolation until extending experience finds for it connections which raise it from being a single fact or act into a member of a series, the series being determined by likeness. I have heard of a part of the world where the natives never saw a stone or any kind of mineral. Suppose an *aërolite* to fall: would it not, while refusing all combination with existing experiences, remain fixed in consciousness as a new and isolated experience, memorable *because* of its negation of the existing order of things and endued with the categories of being, place and time?

CHAPTER III

ASSIMILATION AS THE REAL PROCESS IN THE DYNAMIC GROWTH OF MIND

What I have said is somewhat general, and I need make no apology for resuming the consideration of assimilation in its more direct educational reference.

Within the region of (merely) conscious or attitudinal mind, we are still, I have explained, within the sphere of natural action, reaction, and reciprocity. The whole question is one of mental physics, by which I mean natural processes of a cosmic character with which Will does not interfere. Mind has not yet attained to inhibitive, predictive, or regulative energy.¹ If this be so,

¹ The semblances of this Will or reason regulation in animal instinct are the result of certain innate impulses, concrete aptitudes, association and reflex activity all combined with imitation.

then there is such a thing as the natural dynamics of conscious mind (traversed by the dynamics of material cerebration, to which latter we have already referred). It is the next stage or plane of mind that is distinguished by a notable evolutionary advance—the emergence of Will, and consequent self-consciousness; this profoundly modifies the natural dynamics both of conscious mind and of cerebration, and directs all to ends. This with its form of movement constitutes Reason.

In the sphere of sensational or attitudinal consciousness, before will or the energy of pure reason emerges at all, mind, as I have pointed out, has a way of procedure whereby the material which it receives from without and within the bodily organism are built up or fused into a kind of bastard (attitudinal) knowledge, as in the case of animals and children. A natural process goes on which is in many respects curiously analogous to the higher process of reason itself, but differs in this respect, that the pure energy of will as formal reason is not there, but natural mind-forces alone. It is unselfconscious mind, and as such is adequate to the adaptation of an organism to its environment; but not for thought or knowledge proper. This dynamic process, like all the processes of nature when abstractly conceived, might correctly enough be called "formal;" but this might lead to a confounding of what transacts itself on the lower plane of mind-life with the self-directed energy of the rational and self-conscious center which we call man-mind as differentiated from all other and lower kinds of mind. For this reason and because the processes are natural, like the processes of growth in a tree or the inter-actions of the cerebrum, we call them "dynamic" rather than formal; and the whole result within this sphere is, accordingly, to be viewed as the dynamical upbuilding of mind as a real. This dynamical process is always going on; but when Will enters it disturbs the natural process, raising it to a higher mind-plane by directing it to certain ends which ends are knowledge and truth. This it does under the impulse of the "Form of End" which is the final moment and permanent stimulus and spring of Will.

Let us now try to follow the dynamic process as explained in the preceding chapter: Given a body or mass of assimilated experiences¹ called $abcd$, a new sensational experience e makes its appearance as a negation of this mass (a difference) and several things are now to be noted (which have been already indicated) as necessary to the entering of e into the *real* fabric of mind.

(1) The new experience e must be a separate and single. If it present itself as $exyz$ conscious mind rejects it as an indefinite "somewhat," and it quickly vanishes altogether into nonentity. It must be a single if it is to be granted admission to the existing mass; although it is true this single is almost always a single total or whole whose elements are as yet undivided in sense-perception.

(2) If the new single e (appearing as a difference from and negation of the mass $abcd$) finds in the mass a point of relation and identity, it is assimilated into that mass and enters into the organic structure of the mind-real. It thus, further, shares the stability and permanence of $abcd$ and is henceforth remembered along with $abcd$ as now constituting a part of it. The difference, e , remains a difference, but in association or community of identity with $abcd$: this is dynamic integration.

(3) If the new single, e , finds no community or identity with $abcd$, it stands out in consciousness as a negation of the existing matter of mind. It is related only to the universal conditions of sense, viz., being, place and time, but otherwise stands in isolation, awaiting the support of fresh material whereby it may be woven into the organic real of mind. The existing mass of material in mind cannot suggest this isolated e when it has passed from the field of immediate vision; and, if the impression be not frequently renewed, e will drop from the memory altogether. It has nothing in the existing mass of $abcd$ to

¹As regards the primary and rudimentary experience we may say that object and subject are lost in the sameness of indifference: this is the stage of Feeling. The frequent repetition of presentations at last gives rise to the necessary reflex action and there is a disruption into two, object and subject, and experience *ipso facto* begins as a negation of subject.

hold on to. It is cast out as an alien thing. It is the sensation of identity in difference which constitutes the organic process and it is the sensation of difference in identity that makes growth possible.

NOTE ON COMPARISON.—Whether comparison be strictly part of the dynamic process or not, it is evident that without comparison the dynamic process could not go on. For there must be a primary capacity to 'sense' the likeness and unlikeness of presentations. And this again involves the co-existence of presentations, in the conscious subject, as felt to be like or unlike each other; and constitutes *sensational* comparison.

(4) The result of the assimilation and fusing of particular new experiences into an already existing mass or series might be called a crude sensational general concept, based on likenesses which have not yet been criticised by being subjected to the analytico-synthetic activity of Will-reason.

(5)¹ When reason operates, and, separating *e*, affirms it as a negation of *a b c d* this fact of affirmed negation, which has lifted us out of the sphere of involuntary dynamics, makes *e* more permanent, and there is thus started a new isolated fact which affords a fresh assimilative center. But this self-conscious activity contains the purpose of affirmation and judgment and cannot be expected from the young mind. What we thus affirm is not simply *e*, but *e* as negating the existing mass of mind-material. There is, in truth, a negative relation of *e* to all else in consciousness. With this pure activity of perception and affirmation we have passed beyond the limits of sensational or attitudinal mind. Empirical psychology has now become rational psychology, *i. e.*, the psychology of the reason-movement in itself, and, further, in its transforming influence on the unsifted content of attitudinal mind. The mere dynamic of mind can, however, never be lost sight of, because through it we get all the raw material of inner and outer experience; but it is no longer the mere dynamic. If we do not observe this distinction, psychology is a mass of confusion.

NOTE.—The *Herbartian*, not content with the more thorough elaboration

¹ This is an anticipation necessary for clearness.

of the old doctrine of assimilation, will tell us that the training and discipline of the formal activity is of little, if any, value. There can be no doubt that, in the words of Professor De Garmo,¹ the teacher "must select his material of instruction with respect to ultimate purposes and the pupil's comprehending power: he must arrange the subject-matter not only with respect to the pupil's acquired experience, but also with respect to that which he is going to acquire, *i. e.*, the studies must be brought into the best coördinate relation with one another, and he must adapt his teaching processes so as to secure the quickest apprehension and longest retention of the matter taught." Nay, I would add, he must follow the time-honored rule of basing new experience on old experience in every successive lesson on any particular subject and construct his series of lessons on this general principle. But to omit from consideration those characteristics of the human mind which constitute it a human mind—the pure formal activity—is to ignore the whole question of discipline as opposed to mere instruction and training, and would result in giving us men and women of a very flabby texture—both intellectual and moral. To speak of Herbartian psychology as "the concrete psychology of experience" to the exclusion of a rational psychology which exalts, as it ought to exalt, the formal Will-reason, is to mistake the meaning of the word "concrete" in modern philosophy. The concrete in my mind or yours at this moment is the result of experience acted on and formed to an end, which is truth, by the will as reason. And, if we are to give vigor to intellectual operations and strength to moral character, it is this will-reason which we must never lose sight of. The whole world of the real even after the fusion and inter-action effected by the involuntary dynamic process is even then at best only a mere pulp which has to be made into paper. And if reason has only partially operated, it is opinion not knowledge.

EDUCATIONAL REFERENCE OF THE ABOVE

If the above analysis exhibits the dynamic of mind as a real and if it be the fact that the growth of mind in the young is a dynamic (sensational or attitudinal) process much more than it can be a formal reason process, it is evident that we have to trust to the frequent presentation of material to the young mind more than to spontaneous energy on its part with the purpose of acquisition in it. But, inasmuch as truth, or true knowledge, is the outcome of the spontaneous energy of will exercised on material, we ought to promote this activity in every way we can, taking care not to expect more than tender

¹ *Herbart and the Herbartians*, 1895, p. 33.

years and uncertain growth justify us in expecting. Nature has its own purposes to serve in so ordering that there shall be an age during which the absorption of the material of future knowledge shall be the dominant need. And let us not be disappointed if some children are slow of developing formal self-directing reason. Nay, we may have cause even to regret a premature manifestation of the energy whereby material is coördinated. For no high farming can ultimately yield a good harvest in a soil that has not been enriched to begin with. Our experience of different types of men will satisfy us of this.

But remember that the child is not dependent on you the teacher, for the content of his mind. That has been drawn from numerous sources, and do not be too much afraid therefore of introducing a new fact of experience. It will hook on somewhere and somehow. Can anything be more pedantic than some of the model Herbartian lessons! They would weary the brain of an imbecile by their condescension, and break the mind of the teacher into such little pieces as to endanger his reason. This is method run to seed. Moreover, it is based on a false psychology. We have to remember that the dynamic assimilative process is not the whole; but that each child is, essentially, and from the beginning, a will seizing and coördinating for itself with a purpose of knowledge, and that this has to be taken account of, if there is to be growth. Assume effort and activity on the pupil's part according to his age. If you do not do so, you weaken both his intellectual and moral fiber.

With these general remarks let us note the principles of method which the dynamic mind-process yields.

(1) *Present one new thing at a time.*

This principle is of wide application. For example, do not begin two languages at the same time. Do not teach the history or geography of different countries at the same time. Do not teach two grammatical rules in the same lesson. Do not try to correct two moral defects at the same time: and so on.

(2) By questioning and revision connect the new thing with

the existing mass of experiences so as to quicken the natural dynamic of mind.

This principle is also of wide application. For example, Do not teach the geography or history of even your own country save in relation to the geography and life of the parish and home. Do not teach a new letter of the alphabet save by comparison with those already acquired. Do not attempt a foreign language save on the basis of the native language and grammar. Do not teach a new proposition in geometry save in relation to all that has gone before. So with arithmetic, science, etc.

The above is unquestionably the right course of procedure; but do not think it necessary to avoid all new instruction because it is isolated and unrelatable (save negatively) to existing knowledge; but let this be done sparingly and without insistence.

(3) Be patient; for natural processes will not be hurried or abridged.

Some inadvertently speak of assimilation in its educational reference as if a new experience can become a possession only through likeness or affinity to certain material already existing in the mind. This, however, it would now appear, is not a full account of the event. It is manifest that experience a^2 , presented to experience a , would increase the stock only quantitatively; it is through likeness in unlikeness (identity in difference) that experience of the world builds itself up in the animal and infant mind. This is a qualitative increment. It is through b , c , and d , that experience builds itself up on the foundation a . At the same time the facility, rapidity and certainty of the acquisition of the new presentation is almost immeasurably greater if there be in the new experience a mere repetition of experiences already deposited—in short, if the new presentation is not b in its isolation, but $a\ b$. For example, if a dog or an infant saw a sword for the first time and had never seen even a knife, the sword would be b as an isolated fact, and if it remained in consciousness at all it would do so as a negation of all previous experience, and it would have only external associations of space and time to support it. It

would have to wait for the gradual growth in the mind of other facts related to it before it could enter into the texture or tissue of consciousness as an organic part of its possessions. But if the dog or infant is already familiar with a carving knife, the sword is then no longer *b* to them, but *a b*, and it is at once assimilated as unlikeness in likeness, *i. e.*, built into the organism of mind; especially if I ask the child the uses of a carving knife, and out of this, and on the basis of this, explain the uses of a sword. For, the general rule is that the mind assimilates new material only to the extent that there is already existing material into which it can, through likeness, be absorbed or inwoven.

To take another example: If you try to teach the beast hippopotamus to a child who never saw any animal bigger than a cat, you will utterly fail. If you present a graphic picture of a hippopotamus to the same child, the four legs at least will be an element of likeness to a cat, but it will be so inadequate a basis of likeness that your picture of a hippopotamus will virtually be *b*, not *a b*, and will stand out in negative isolation in the mind of the child waiting for further experiences, *e. g.*, dogs, oxen, rhinoceroses, elephants, before the hippopotamus fully enters in and remains. If he had had these experiences before you brought the hippopotamus to his attention, he might have assimilated the hippopotamus even without a picture of it, if you had first called on his imagination to give you a description of one or two beasts most like to it.

It is at once clear from the above that if we are to engage the attention and interest of the young in what we may desire them to know, the following rules must be observed as flowing from our analysis:

Rule 1. Teach nothing as an isolated unit of fact. If you cannot relate it really, relate it externally (space or time).

Rule 2. Present new knowledge to a pupil in such a way that it will relate itself, or fit into, knowledge already possessed, (*i. e.*, like in its unlikeness), if you wish the new to be accepted and assimilated. Build up knowledge as a real connected whole in each department of study.

Corollary.—In giving new lessons on a subject always go back on what has been already taught, *i. e.*, prepare the mind of the pupil for the lesson.

But this is by no means the whole of the educational lesson that is taught. For inasmuch as it is the relations of things in respect of time, place, likeness and unlikeness, by which the fabric of mind is naturally and dynamically built up, the teacher has to take advantage of this fact to extend the relations of the lessons which he teaches in so far as these relations are relevant to the subject. Let me take a simple illustration. In the infant school I give an object lesson on tea, and content myself with showing tea and relating it to, let us say, China (as yet a mere name), and to its uses, and to its differences or likenesses to other beverages familiar to the children. In the stage above the infant school I relate the tea leaves to the plant of which they are the leaves, the countries where the plant grows, the climatic conditions, the way in which it is brought to this country, other beverages, etc., in more detail than in the infant school.

I thus, by my intervention, help the boy to extend the relational system (so to speak) which has tea for its center, and so I largely increase, in a quite relevant and natural way, the substance of his mind. So with other subjects or objects. This is teaching. Education is an extensive as well as intensive process, and by extending the intellectual horizon I stimulate activity of mind for further acquisition all round, besides adding to the amount of assimilated material which will find itself from day to day coming into touch with fresh material and at once absorbing it.

It is to be held accordingly that, if we would follow nature, our teaching must be relational, not merely in the way of our presenting a new thing or thought, but so that what is taught should be made the starting point for extending an acquaintance with further relations as yet unknown. We should deliberately foster the natural operation of mind in building itself up by bringing the absent within its range. If we do not do this, we so far forego our duty as instructors by leaving nature to itself

—a pretty notion, doubtless, but suicidal in the case of the school.

There is in the growth of mind a Relational stage—that is to say, a period when the mind not only is conscious of relations (which it always is), but is actively *looking out for* relations with a view to the extension of its material. Consequently, we have this further principle in education, yielded by this instinct and mode of growth, viz.:

Relate your various teachings as much as possible, enriching them with as many relevant associations as possible.

The lesson in the reading-book is merely a starting point for an intelligent conversation.

S. S. LAURIE

UNIVERSITY OF EDINBURGH

(To be Continued.)